Thus on August 31, at $11^h.5$, the satellite had approached the planet sensibly since $9^h.5$; on Sept. 2 it was considerably distant on the other side; it was returning on Sept. 3; had got back again on the 4th; and on the 6th, at 9^h, was nearly in the same position as on August 31 at $11^h.5$. The appearances are fully explained by the hypothesis of a satellite, and it seems impossible to explain them in any other way. The faintness of the object, which will not bear any illumination, will scarcely allow us to hope for any *very* accurate measures of its greatest elongations; such, for instance, as would give a *precise* value of the mass of *Neptune*: but Mr. Lassell's estimate of the elongation and the periodic time of the satellite are probably not far from the truth.

Ephemeris of NEPTUNE *for Greenwich Mean Midnight.*
By Mr. Adams.

Date.	R.A.	N.P.D.	Date.	R.A.	N.P.D.
1847.	h m s	° ′ ″	1847.	h m s	° ′ ″
Sept. 12	22 3 9·27	102 35 45·8	Oct. 7	23 0 5·99	102 46 51·0
13	3 3·53	36 17·2	8	1 2·16	47 11·4
14	2 57·83	36 48·2	9	0 58·42	47 31·1
15	52·19	37 19·0	10	54·79	47 50·4
16	46·61	37 49·4	11	51·27	48 9·0
17	41·08	38 19·4	12	47·85	48 27·1
18	35·62	38 49·1	13	44·54	48 44·5
19	30·21	39 18·4	14	41·33	49 1·3
20	24·87	39 47·3	15	38·24	49 17·6
21	19·61	40 15·8	16	35·26	49 33·2
22	14·41	40 44·0	17	32·39	49 48·2
23	9·27	41 11·7	18	29·63	50 2·6
24	2 4·22	41 38·9	19	27·00	50 16·3
25	1 59·24	42 5·8	20	24·47	50 29·5
26	54·34	42 32·2	21	22·07	50 41·9
27	49·51	42 58·2	22	19·78	50 53·7
28	44·76	43 23·7	23	17·61	51 4·8
29	40·10	43 48·7	24	15·56	51 15·3
30	35·52	44 13·3	25	13·64	51 25·1
Oct. 1	31·03	44 37·4	26	11·83	51 34·3
2	26·62	45 1·0	27	10·15	51 42·8
3	22·30	45 24·1	28	8·59	51 50·6
4	18·08	45 46·6	29	7·15	51 57·8
5	13·95	46 8·6	30	5·85	52 4·2
6	1 9·92	102 46 30·1	31	23 0 4·66	102 52 10·0

Date.	R.A.	N.P.D.	Date.	R.A.	N.P.D.
1847.	h m s	° ′ ″	1847.	h m s	° ′ ″
Nov. 1	22 0 3·61	102 52 15·1	Nov. 21	22 0 9·99	102 51 18·2
2	2·68	52 19·5	22	11·69	51 18·3
3	1·88	52 23·2	23	13·53	51 7·8
4	1·21	52 26·2	24	15·49	50 56·5
5	0·67	52 28·4	25	17·60	50 44·6
6	22 0 0·26	52 30·0	26	19·83	50 32·0
7	21 59 59·98	52 30·9	27	22·19	50 18·7
8	59·84	52 31·0	28	24·67	50 4·7
9	59·82	52 30·4	29	27·30	49 50·0
10	21 59 59·94	52 29·2	30	30·05	49 34·6
11	22 0 0·19	52 27·2	Dec. 1	32·92	49 18·5
12	0·57	52 24·5	2	35·92	49 1·7
13	1·09	52 21·1	3	39·05	48 44·3
14	1·74	52 17·0	4	42·31	48 26·2
15	2·52	52 12·2	5	45·69	48 7·4
16	3·43	52 6·6	6	49·20	47 47·9
17	4·47	52 0·3	7	52·83	47 27·8
18	5·65	51 53·3	8	0 56 59	47 7·0
19	6·96	51 45·7	9	1 0·47	46 45·5
20	22 0 8·41	102 51 37·2	10	1 4·47	46 23·4
			11	22 1 8·59	102 46 0·6

Observations of ASTRÆA.

CAMBRIDGE. Northumberland Equatoreal. (Prof. Challis.)

	Green. M.T.	R.A.	Cal.—Obs.	No. of Comp.	N.P.D.	Cal.—Obs.	No. of Comp.
1847.	h m s	h m s	s			″	
July 22	9 59 34·3	15 15 20·49	+0·75	2	101 36 35·7	+ 8·6	3
Aug. 11	16 44·8	27 13·31	+1·12	1	103 13 15·7	+15·8	1
12	21 26·7	28 0·00	+1·56	3	18 42·2	+ 5·6	3
13	9 15 12·7	15 28 47·52	+1·80	6	103 23 50·8	+10·9	6

"The observations on the two first days were doubtful; those of August 12 and 13 were satisfactory. The R.A. and N.P.D. are freed from refraction and parallax, and are compared with the R.A. and N.P.D. interpolated from the ephemeris of M. D'Arrest, given in No. 603 of the *Astronomische Nachrichten*. The follow-